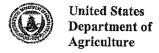
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Do not assume content reflects current scientific knowledge, policies, or practices.



Forest Service

**Southwestern Region** Forest Health Arizona Zone Office

2500 S. Pine Knoll Drive Flagstaff, AZ 86001-6381 FAX (928) 556-2130 Voice (928) 556-2073

File Code: Route To: 3410

Date: December 1, 2004

Subject:

2004 Forest Insect and Disease Aerial Detection Survey Results - A-S NF

(alpinerd) (blackmesard) (cliftonrd) (lakesiderd) (springervillerd)

To: Forest Supervisor, Apache-Sitgreaves National Forests

The 2004 insect and disease aerial detection survey has been completed for Arizona. Bobbe Fitzgibbon, Entomologist, Forest Health, Arizona Zone flew over the Apache-Sitgreaves NF and adjacent state and private forested lands July 26 & 27 and August 10-12, 2004. The data from those surveys have been processed for the Apache-Sitgreaves NF and enclosed are a map and spreadsheet showing insect and disease activity detected during these surveys. Copies of this letter, maps and spreadsheet have been forwarded to the Districts of your Forest. Electronic ARC/Info files have also been sent to the Forest. The following is a brief summary of observed activity.

Pine mortality caused by bark beetles has continued to decline statewide. However, some areas continue to experience higher than normal levels of tree mortality. On the Apache-Sitgreaves NF, bark beetle-caused tree mortality decreased from 281,512 acres in 2003 to 26,635 acres in 2004. There were significant drops in tree mortality in both piñon and ponderosa pine. However, there are still scattered pockets of ponderosa pine mortality throughout the Forest. Most of the Douglas-fir and spruce mortality caused by bark beetles continues to occur on the Alpine RD.

Aspen decline, noted as aspen defoliation in the spreadsheet, decreased statewide and on the Apache-Sitgreaves NF. Approximately 5,329 acres were affected on the Apache-Sitgreaves NF in 2004, primarily on the Apache side of the Forest. Affected areas have a combination of symptoms including reduced canopy, branch dieback and mortality. Also, many of these sites appear to be associated with poor site quality, shallow soils, and defoliation by a severe frost that occurred in early June of 1999.

Spruce aphid caused defoliation has decreased in 2004 to approximately 5,185 acres. This in comparison to 49,386 acres detected in 2003. This decrease is due partially to a decline in the spruce aphid population and partially to spruce mortality caused by heavy defoliation in previous years (a decline in suitable host type).



If you have any questions regarding the survey data, please contact Bobbe Fitzgibbon at (928) 556-2072 or via e-mail at <a href="mailto:riftzgibbon@fs.fed.us">riftzgibbon@fs.fed.us</a>. For any future assistance you may have regarding forest health issues on your forest please feel free to contact any of our staff here in Flagstaff,

/s/ John Anhold JOHN ANHOLD

Arizona Zone Leader Forest Health

Enclosure

cc: Deb Bumpus, Gayle Richardson, Joseph A Hamrick, William H Ripley, Monica Boehning, Leonard Lucero, Debra Allen-Reid, Steve Dudley, Bobbe Fitzgibbon, MaryLou Fairweather, Joel McMillin

Arizona: Aerial Detection Survey Results by Site for 2004, 2003, 2002 & 2001 (in acres)

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|          | 169                 | 33,968  | 280  | 1,269  | 40  |   |   |   |  |   |   | 1,693   | 786  | 17,700  
   
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4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,552     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,648     6,542     5,648     6,542     3,008     4,129     5,694     4,129     3,694     4,129     3,694     4,129     3,694     4,121     3,694     4,121     3,694     4,121     3,156     4,111     4,121     3,156     4,111     4,121     3,156     4,111</th><th>128     110,051     169     576     15,682     3,420     129,898     737     12,146     1,938       128     60,293     33,968     914     4,558     99,861     7,37     12,146     1,938       4     60,293     33,968     914     4,558     99,861     7,591     7,591     16,370     4,129       5     6,012     1,269     266     1,233     583     17,591     16,370     4,129       66,584     25     86     66,646     1,75     4,221     30,69       489     1,383     1,383     1,383     1,383     1,383       1,383     1,341     1,693     12,15,885     187     26,92     3,156       6,546     17,700     33,2653     26,93     11,256     3,223     4,111       111,219     4,197     3,0253     3,102     3,223     4,111</th><th>128 110,051 169 576 15,682 3,420 129,896 7737 12,146 1,938 15,222 1,633 15,831 12,806 280 861 12,33 583 17,919 75,579 40 25 86 6,569 6,599 861 13,383 12,83 12,1383 11,138</th><th>  10,005    169   576   15,682   3,420    129,898     1737   12,146   1,938     1,938     1,299     1,383
    1,383     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333     1,333</th><th>  128   110,051   169   576   15,682   3420   129,888   12,919   129,888   12,919   12,919   12,212   1,653   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,524   1,239   1,236   1,239  </th><th>  128   110,051   168   576   15,682   3420   129,888   14   4,552   99,863   12,918   12,919</th><th>  12,005   169   576 15,882   3420   129,898   737 17,146   1,938   12,919   1,2919</th><th>  128</th><th>  128   0.005</th><th>  128</th><th>  128   110,051   169   576   15,682   3,420   129,899   12,919   15,222   16,533   16,533   12,919   12,919   16,533   16,533   12,919   16,533   16,533   12,919   12,919   16,533   16,533   12,919   12,919   16,533   16,533   12,919   12,919   16,533   16,533   16,533   12,919   12,919   16,533   16,533   12,919   12,519   16,533   12,919   12,519  
12,519   12,519  </th><th>  128</th><th>  128</th><th>  128</th><th>  128   0.005   1.005</th><th>  128   110,0051   168   510   51,005   510   51</th><th>  128   110,051   168   576   15,823   34,508   94,608  </th><th>  118</th><th>  128   10,021   169   576   1,582   3400   1,598   89   1,21   1,610   1,698   1,21   1,610   1,21   1,610   1,21   1,610   1,21   1,610   1,21   1,</th><th>  1.10</th><th>  128</th></td<> | 128     10,051     169     576     15,082     3,420     4,558     99,864     737     12,146     1,938       128     60,293     33,968     914     4,558     99,864     5,222     1,653       4     6,012     1,269     86     1,233     583     12,919     56     5,222     1,653       59     7,579     40     7,365     86     66,695     175     4,129     3,008       66,584     25     86     66,695     175     4,221     305       489     1,383     1,383     1,383     3,156     11       61,341     1,693     12,15,885     187     7,8316     5,879     3,156       195     786     17,700     33,2,653     26,932     11,115     3,223     4,111 | 128     10,051     169     576     15,882     3,420     4,558     99,864
    4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,558     99,864     4,552     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,222     1,653     5,648     6,542     5,648     6,542     3,008     4,129     5,694     4,129     3,694     4,129     3,694     4,129     3,694     4,121     3,694     4,121     3,694     4,121     3,156     4,111     4,121     3,156     4,111     4,121     3,156     4,111 | 128     110,051     169     576     15,682     3,420     129,898     737     12,146     1,938       128     60,293     33,968     914     4,558     99,861     7,37     12,146     1,938       4     60,293     33,968     914     4,558     99,861     7,591     7,591     16,370     4,129       5     6,012     1,269     266     1,233     583     17,591     16,370     4,129       66,584     25     86     66,646     1,75     4,221     30,69       489     1,383     1,383     1,383     1,383     1,383       1,383     1,341     1,693     12,15,885     187     26,92     3,156       6,546     17,700     33,2653     26,93     11,256     3,223     4,111       111,219     4,197     3,0253     3,102     3,223     4,111 | 128 110,051 169 576 15,682 3,420 129,896 7737 12,146 1,938 15,222 1,633 15,831 12,806 280 861 12,33 583 17,919 75,579 40 25 86 6,569 6,599 861 13,383 12,83 12,1383 11,138 | 10,005    169   576   15,682   3,420    129,898     1737   12,146   1,938     1,938     1,299     1,383     1,333 | 128   110,051   169   576   15,682   3420   129,888   12,919   129,888   12,919   12,919   12,212   1,653   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,523   1,524   1,239   1,236   1,239 | 128   110,051   168   576   15,682   3420   129,888   14   4,552   99,863   12,918   12,919 | 12,005   169   576 15,882   3420   129,898   737 17,146   1,938   12,919   1,2919 | 128       | 128   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005  
0.005   0.005 | 128      | 128   110,051   169   576   15,682   3,420   129,899   12,919   15,222   16,533   16,533   12,919   12,919   16,533   16,533   12,919   16,533   16,533   12,919   12,919   16,533   16,533   12,919   12,919   16,533   16,533   12,919   12,919   16,533   16,533   16,533   12,919   12,919   16,533   16,533   12,919   12,519   16,533   12,919   12,519 | 128           | 128        | 128              | 128   0.005   1.005 | 128   110,0051   168   510   51,005   510   51 | 128   110,051   168   576   15,823   34,508   94,608  
94,608   94,608 | 118           | 128   10,021   169   576   1,582   3400   1,598   89   1,21   1,610   1,698   1,21   1,610   1,21   1,610   1,21   1,610   1,21   1,610   1,21   1, | 1.10              | 128                |